

## Commentary

# Fertility Preservation Among Cancer Patients in Saudi Arabia: A Hot Topic

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## Abstract

The future quality of life of cancer patients with respect to their fertility is impacted by cancer treatment for those who were diagnosed before or during their reproductive years. Fertility cryopreservation technologies give hope to cancer survivors for life following cancer treatments. However, a limited number of patients are taking advantage of the benefits provided by fertility preservation alternatives because of a lack of standardized guidelines, a lack of awareness, and the need for additional education and training.

**Keywords:** Knowledge, Attitudes, Practices, Fertility preservation, Cancer patients, Saudi Arabia

## Introduction

Worldwide, the prevalence of cancer patients is increasing, with a long-term incidence projection showing that there will be a 1.8-fold increase by 2030, making it a life-threatening diagnosis [1]. Fortunately, recent advances in cancer treatment have resulted, for example, in female cancer survival rates increasing to 10% of all survivors under the age of 40 [2,3]. However, it is known that a number of cancer treatments harm the reproductive system, resulting in sterility or infertility. In order to improve the quality of life of cancer survivors of childbearing age, fertility preservation (FP), advice, and treatment are increasingly being offered [4]. The knowledge, attitudes, and practices (KAP) regarding FP, especially in cancer patients, are very advanced worldwide. In Saudi Arabia, FP in cancer patients is a topic that has gained increasing attention and importance. However, it is still a difficult problem, and for a variety of reasons, referral and consulting are not yet widely used.

### The KAP among Oncologist

According to our previous studies in 2011, we identified several knowledge gaps among oncologists that could impact their attitude, which in turn was reflected in their poor practice. For example, the possibility of preserving female fertility was unknown to 45% of oncologists [5]. At that time, there was limited awareness about FP options, a lack of standardized guidelines, and a need for further education and training in this area, especially in the absence of legislation.

Twelve years after the above-mentioned study, the advice of senior religious scientists in 2018 allowed the freezing of tissue of the ovarian membrane, the entire ovary, and eggs for later use in reproduction in order to preserve the offspring. In a recent study conducted in

2023, we investigated whether oncologists' knowledge, attitudes, and referral procedures regarding FP have improved. Their level of understanding has greatly increased, as we have discovered. Doctors were actually found to be significantly more knowledgeable about a wide range of female FP options, the most prevalent of which was egg cryopreservation (77%), than other options. It was still necessary to improve patient counseling and referrals to fertility services, though. Our results demonstrate Saudi Arabia's deficiency in clinical practice standards for FP in cancer patients. [6].

### The KAP among Health Practitioners

Understanding the knowledge, attitudes, and practices of health practitioners toward fertility preservation is crucial in ensuring that individuals receive accurate information and appropriate care regarding their reproductive options.

A recent study conducted in Saudi Arabia aimed to assess the attitude of health practitioners towards fertility preservation and showed that clinical practitioners' knowledge is still inadequate. They concluded that there is a need to train health practitioners and establish practice guidelines and fertility preservation clinics for cancer patients [7].

### The KAP among Medical Student

Medical students are the future doctors, and in order to successfully deal with the topic of FP, medical training should begin. To implement cancer education curricula related to fertility preservation, it is necessary to identify any gaps and other barriers that could be overcome through medical education to improve future clinical practices. Our recent study on the attitude and knowledge among

Saudi medical students toward FP showed respectable awareness and attitudes toward FP. However, there are still some gaps; almost half of the respondents mentioned that cancer treatment should be started before FP, suggesting the need to improve education about FP in the medical curriculum [8].

### The Knowledge among Cancer Patients

Cancer patients who may face fertility challenges in the future were recently surveyed. The study by Abusanad A. et al. in 2022 showed that 56.30% of the cancer patients surveyed had satisfactory knowledge about the consequences of cancer treatment for infertility and expressed a desire to have children through FP in the future. However, this desire has been hampered by limited oncofertility care and FP procedures. Unfortunately, such patients were occasionally referred to a specific fertility facility, where only 17% saw a fertility specialist and only 37.8% received fertility counseling [4].

### Conclusions

To the best of our knowledge, there have not been studies addressing such an important topic in our region for a decade. To meet the patient's needs and improve the quality of life of cancer survivors, the best way is to increase cancer awareness through cancer education and disseminate information about cancer prevention. This can be done in a number of ways: through educational events and continuing medical education programs for medical students, oncologists, and nurses caring for cancer patients whose fertility is affected by cancer treatment. Such educational programs will expand their knowledge and improve their practice. The public should be aware of the availability of fertility preservation services in government and private centers, as well as the cost, timing, and various procedures.

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### Conflict of Interest

The author has no conflict of interest to declare.

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